

The Genus *Macrohomotoma* (Psyllidae or Chermidae).

BY D. L. CRAWFORD.

(Presented at the meeting of May 1, 1924.)

MACROHOMOTOMA Kuwayama.

This genus was erected in 1907 by S. Kuwayama¹ for a single species found in Formosa, *M. gladiatum* Kuwayama. In 1914 an African species, previously described under another generic name,² was referred by me to this genus and the two species compared.³ Subsequently, additional specimens representing this genus have come to hand from Borneo, the Tenimber Islands, Southern China, and India. Some of these latter seemed to be so closely similar to the Formosa species that they were at first identified with that species,⁴ but in reality there appear to be several quite distinct species. Eleven specimens apparently representing a new species of this genus were collected by F. X. Williams on *Ficus*, in the Philippine Islands.

One of the peculiarities of members of this genus is the strikingly large pterostigma, which frequently has the appearance of being an area (cell) surrounded by a very broad vein.

The genus appears to be closely related to *Pauropsylla* and belongs in the same subfamily with it, instead of in the Carsidarinae as earlier stated.

KEY TO THE SPECIES.

- A 1. Stem of cubital veins less than one-third as long as basal cubital branch (Cu2); antennae as long as width of head, including eyes.
- B 1. Stem of cubital veins about one-eighth as long as basal cubital branch; pterostigma broadly elliptical, clear; female genital segment very long and slender; vertex with a deep depression on each side of median line.....*M. nyasae* (Newstead)
- B 2. Stem of cubital veins about one-fourth as long as basal cubital

Proc. Haw. Ent. Soc., VI, No. 1, August, 1925.

¹ Trans. Sapporo Nat. Hist. Soc., Vol. II, p. 179, 1907.

² *Pseuderopsylla nyasae* Newstead, R. Bul. of Ent. Research, II, p. 105, 1911.

³ Ent. News, Vol. XXV, p. 62, 1914.

⁴ Philippine Journal Science, Vol. XV, p. 144, 1919 (*Pauropsylla apsyloides*), and Vol. XVII, pp. 353, 1920.

branch; pterostigma twice as long as broad, black at apex; vertex without deep depressions. *M. sandakana* n. sp.

A 2. Stem of cubital veins one-third to one-half as long as basal branch of cubitus; antennae usually about as long as width of head between eyes, sometimes longer.

B 1. Female genital segment about half as long as width of forewing; antennae not very slender; thoracic dorsum usually plain brown in color; pronotum without hairs.

C 1. Forewings without a dark stripe in cubital area; antennae thick, not longer than width of head between eyes, segments nearly half as thick as long.
..... *M. gladiatum* Kuwayama

C 2. Forewings with a conspicuous black stripe along the cubital veins from the middle of the wing to the posterior margin; antennae a little longer than width of head between eyes, not very thick beyond the second segment. *M. striata* n. sp.

B 2. Antennae very slender, sometimes nearly as long as width of head, including eyes (chiefly in the males); female genital segment very long and slender, as long as greatest width of forewing; thoracic dorsum conspicuously spotted with large black or dark brown areas; pronotum with a row of hairs on hind margin. *M. williamsi* n. sp.

Macrohomotoma williamsi n. sp.

Length of body (male), 2.7 mm.; (female) 3.8 mm.; forewing (female), 5 mm. General color, brown to reddish brown, with ten to thirteen black or dark brown spots of irregular extent on thoracic dorsum; abdomen and venter light brown.

Vertex smooth, roundly convex, with a slight linear depression on each side of median line; frons small, but visible below front ocellus. Antennae about as long as width of head or often less, very slender, segments distad of III being three or four times as long as thick; terminal setae long.

Thorax large; pronotum with a row of delicate hairs along hind margin; metanotum with a pair of small horn-like processes. Forewings hyaline, acutely pointed, large; pterostigma nearly or quite twice as long as broad, broadest at base, often brownish at apex, half as long as radius; stem of cubital veins from one-third to one-half as long as basal cubitus (Cu2), and about equal in length to the stem of the medial and cubital veins beyond the forking of the radius.

Abdomen short. Female genital segment very long, longer than rest of abdomen or about as long as greatest width of forewing, slender and

tapering to acute point. *Male* forceps slender, a little longer than anal valve.

Described from five females and six males collected by F. X. Williams on *Ficus clementis*, on Mount Maquiling, Philippine Islands, elevation 1700 feet, May 6, 1921.

***Macrohomotoma sandakana* n. sp.**

Body and wings about the same size as *M. williamsi*. General color, dark chocolate-brown on head and thorax, abdomen a little lighter color; surface conspicuously reticulated with fine lines.

Head very strongly deflexed, vertex smooth, scarcely marked by any depressions at all. Antennae slender, about as long as width of head, including eyes; segments I to IV yellowish or orange, V to VIII same, but tipped with black, IX to X black.

Forewings clear except a black spot at apex of pterostigma and one at tip of clavus. *Male* genitalia smaller than in *M. williamsi*.

Described from one male taken at Sandakan, Borneo, by C. F. Baker, and with several other specimens previously identified with *M. gladiatum* Kuwayama, with some difference, however, noted, and the possibility of its being a distinct species remarked.

***Macrohomotoma striata* n. sp.**

Length of body (female), 4.2 mm.; forewing, 5 mm. General color brown, with indistinct splotches of slightly darker brown on thoracic dorsum.

Vertex broad, smooth, strongly deflexed downward, with a slight foveal depression on each side of the median line. Frontal sclerite about half covered by the anterior ocellus and about half visible below the ocellus. Antennae a little longer than width of head between the inner margins of the eyes, but not as long as width of head, including eyes; moderately slender beyond the second segment.

Thorax large and stout, smooth, without pubescence. Metanotum with a pair of small horn-like processes. Forewings hyaline, with a conspicuous black or brown stripe extending along cubitus from medial vein to posterior margin; stem of cubital veins just one-third as long as Cu₂.

Abdomen large, with genital segment of female moderately long, but only about half as long as greatest width of forewing.

Described from one female taken on *Ficus* sp. at Keollegal, India, May, 1916, by T. V. Ramakrishna.

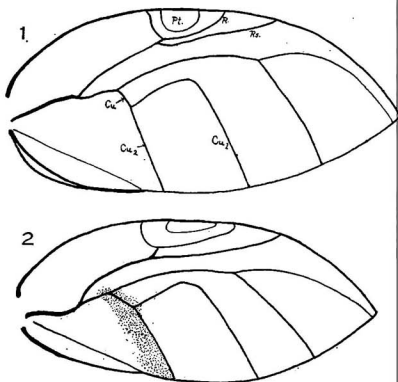


Fig. 1. Forewing of *Macrohomotoma sandakana*. Cu, stem of cubital veins; Cu 1, Cu 2, cubital branches; R, radius; Rs, radial sector; Pt, pterostigma.

Fig. 2. Forewing of *Macrohomotoma striata*.